



The puzzle of measuring Global Value Chains – the business statistics perspective

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Measuring Global Value Chains (GVCs) is recognized as a prioritized but complicated challenge for statistical offices as the concept is complex. GVC's are difficult to measure due to interlinked cross border relations of goods, services, labour and capital at the level of the individual enterprise. A focal point in GVCs is the relationship between enterprises and currently only few statistics measure directly linkages between enterprises (e.g. FATS statistics) and new types of statistical evidence needs to be developed by linking different data sources at enterprise level. Measuring GVCs consists of a number of conceptual and methodological aspects which need to be combined in an analytical framework. Pieces of the puzzle exist already today, e.g. the Trade in Value Added (TiVA) concept, Trade by Enterprise Statistics (TEC), or Foreign Affiliates Statistics (FATS) which constitute elements of a measurement framework under elaboration but other elements are still missing, such as information on business functions, governance structures and network relations. The OECD-WTO TiVA initiative has constructed a set of international Input Output tables based on official national statistics to measure the flows of value added. The key assumption in TiVA is the 'homogeneous industries', assuming that all firms active in a particular industry have the same 'production' function, i.e. they have the same import and export intensity and import and export markets, etc. Better accounting for the heterogeneity across firms regarding their role and position in value chains will substantially improve the TiVA statistics. Given that the extent of GVC involvement (e.g. through foreign ownership or foreign affiliates, and via the intensity of imports and exports) is correlated with virtually all dimensions of a country's economic growth (value added, productivity, employment), more and better data on how firms within an industry differ with respect to their embeddedness in GVCs, is vital for policy making. This paper describes recent initiatives in business statistics within the European Statistical System to address the issue of GVCs mainly by linking existing statistical registers at enterprise level and proposes a way forward for measuring GVCs in order to both establish new information at enterprise level and to improve the basis for macro-economic initiatives such as the TiVA project.

Keywords: Global Value Chains; Firm heterogeneity; Micro Data Linking; Business Functions.